# **CDC in Costa Rica**





Staff

CDC office (physical presence) **No** U.S. Assignees **No** Locally Employed

# **At a Glance**

Population: 4,726,000 Per capita income: \$10,930 Life expectancy at birth women/men: 82/77 yrs

Source: Population Reference Bureau Fact Sheet, 2011

# Top 10 Causes of Death

- 1. Cancer 20%
- 2. Ischemic Heart Disease 16%
- 3. Stroke 7%
- Chronic Obstructive Pulmonary Disease 5%
- 5. Chronic Kidney Disease 4%
- 6. Road Injuries 4%
- 7. Cirrhosis 4%
- Lower Respiratory Infections 3%
- 9. Diabetes 3%
- 10. Interpersonal Violence 2%

Source: GBD Compare (http://viz.healthmetricsandevaluation.org/g bd-compare/), 2010

The Center for Global Health and Prevention (CDC) has collaborated with public health institutions in Central America since the 1960s. Through these partnerships CDC has been able to address Costa Rica's priority public health burdens from malaria to influenza. CDC's work in Costa Rica includes HIV/AIDS, the Field Epidemiology Training Program (FETP), and the International Emerging Infections Program.

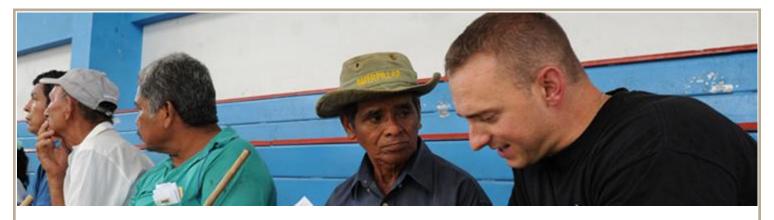
#### HIV/AID9

In Costa Rica CDC is developing a culture of evidence-based decision-making by building strong surveillance and health information systems. One model program currently underway is the HIV and sexually transmitted infections (STI) surveillance and control program focusing on the most-at-risk populations (better known by the Spanish-derived acronym, VICITS). It is an HIV prevention strategy combining STI diagnosis and treatment, condom use promotion, behavioral change, and an information system to monitor the impact of the project. In addition to being trained in counseling for risk reduction and condom use promotion, health personnel also learn skills for immediate diagnosis and treatment without requiring expensive and time-consuming lab tests or advanced medical skills. To strengthen and improve laboratory STI and HIV diagnostic capacity, CDC provides equipment and reagents, support for reproductive health services, and support for outreach activities to improve coverage and compliance with follow-up visits. Program goals include strengthening HIV patient monitoring, strengthening an early warning system that alerts for nonadherence to drug regimens in infants born without HIV, and enabling local staff to independently use and maintain this system.

#### Influenza

CDC supports implementing the International Health Regulations and the Pan American Health Organization's Operational Guidelines for National Intensified Surveillance of Severe Acute Respiratory Infection. CDC established a sentinel surveillance network in a hospital and two clinic sites to collect data on influenza and severe acute respiratory infections. This network has become a model adopted by national health authorities and is being implemented in seven health regions in selected hospitals and clinics. The Social Security Fund of Costa Rica designated health professionals to be in charge of the sentinel surveillance for influenza and other respiratory viruses, which will lead to the institutionalization of this strategy. As part of the development of this surveillance network, 28 healthcare workers were accredited and basic laboratory equipment was purchased. This model system is returning key information on healthcare utilization and economic costs associated with severe acute respiratory infections, and sickness and death due to influenza.





### **Field Epidemiology Training Program (FETP)**

The FETP in Costa Rica is a two-year, in-service program that helps countries build sustainable capacity for detecting and responding to health threats. Costa Rica's FETP is coordinated by the epidemiology department of the Social Security Institute of Costa Rica, and is the first national program in the region to reach sustainability. It is accredited by the Universidad Nacional of Costa Rica and has graduated 20 field epidemiologists since its beginning. By 2010 an intermediate level program was developed using the Central America regional standardized curriculum. This level is accredited by the Center for Strategic Development of Human Information and Social Security. In 2012, a web-based, basic-level program to permit distance learning is being launched in collaboration with the Pan American Health Organization. Many important outbreak investigations have been conducted by the FETP residents. In an outbreak in the Huetar region they identified 688 cases of norovirus, a very contagious virus that can cause diarrhea, vomiting, nausea, and stomach pain. Additionally, the trainees conducted an outbreak investigation of a healthcare-associated infection, Clostridium difficile B1/NAP1, in a general hospital. Costa Rica was the first country in Latin America to report an outbreak of this stronger strain of C. difficile, which is a bacterial infection that can cause diarrhea and has been linked to many deaths.

### **International Emerging Infections Program (IEIP)**

The International Emerging Infections Program in Central America and Panama (IEIP-CAR) began activities in 2007. The central mission of IEIP-CAR is to assure a rapid and effective response to emerging infectious disease threats in the region by strengthening the capacity of the Ministries of Health (MoHs) and academic institutions to identify emerging infections and prevent, control, and treat

infectious diseases. In 2010, IEIP-CAR worked very closely with the Costa Rican MoH and the Universidad del Valle on RECETA, a Central American network of epidemiologists and microbiologists dedicated to enhancing the epidemiology laboratory capacity of the region for foodborne diseases. It has trained local staff and sponsored national studies in advanced topics ranging from enhanced Salmonella surveillance to burden of illness.

## **Preparedness and Response**

Over recent decades Central American has been struck by countless natural disasters and civil unrest emergencies. Due to the annual occurrence of such disasters CDC, in collaboration with the Central America Ministers of Health Committee (COMISCA) has developed and administered an emergency preparedness and response assessment that includes developing the following: a public health emergency plan; command and control; communications infrastructure; public information and risk communication; logistic and operational processes; medical coordination; train, exercise, and evaluate; and surveillance systems. An emergency preparedness response was conducted in the MoH as part of a regional preparedness effort.

For more information please contact Centers for Disease Control and Prevention:

### **CDC-Atlanta**

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# **Impact in Costa Rica**

- Increase capacity in the region to test for dengue virus with novel and recently approved techniques.
- 28 health care workers were accredited by the Center for Strategic Development and Health Information and Social Security to be part of the sentinel surveillance network for influenza and other respiratory viruses.
- Implemented real-time multiplex technology for the diagnosis of influenza and other respiratory viruses at the National Children's Hospital in Costa Rica for research use.
- Since 2002, over 250 persons from 8 countries have received training on data collection.